



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,956	11/14/2003	Chung-Kuang Lin	BHT-3118-44	7777

7590 07/06/2005
TROXELL LAW OFFICE PLLC
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

AYRES, TIMOTHY MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

3637

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,956

Applicant(s)

LIN ET AL.

Examiner

Timothy M. Ayres

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

This is a first office action on the merits of application SN 10/706,956.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spring attached to the runner and the engagement of the ribs in particular to what is meant by "ball and socket mechanism" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 3637

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The applicant should have given reference to the related patent that he has obtained on a similar invention.

Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. The disclosure is objected to because of the following informalities:
 - a. In the abstract, 4 lines down the word "intermediate" should be followed by the word rib
 - b. In the abstract, 4 lines down after the word "between" should be the word "the" and not "he"
 - c. In the abstract, lines 6-7 should be rewritten as "secured with a spring device between the stretcher rib and the rear rib."
 - d. On page 1, 5 lines down in the summary of the invention, the word "intermediate" should be followed by the word "rib"

- e. On page 1, 5 lines down in the summary of the invention the word “between” should be the word “the” and not “he”
- f. The paragraph at the end of page three and the start of page four should be broken up into a couple sentences so that it is clearer.
- g. The third paragraph on page 4 uses “upper or inner” and “lower or outer.” One reference either “inner” and “outer”, or “lower” or “upper” should be used and stuck with throughout the disclosure. Other places this is done; Page 5 bottom of second paragraph; Page 5 top of third paragraph; on page 6 the second line down;
- h. On page 4, 5th paragraph, cannot use the word “or”, either the rod is slidably held or the major portion of the rod is slidably held, cannot be both unless it is described that both would perform the same function.
- i. The last paragraph on page 4 should be broken up into multiple sentences for clarity.
- j. In the second paragraph on page 5 and again in the last paragraph, the word “may” is used and should only be used when describing an alternative material or shape, there was never a original material or shape described to compare to.
- k. Last line of page 6, “smoothening the” should be replaced with “a smoother”

Art Unit: 3637

l. First line on page 7 should be re written as "preventing noise from occurring among the ribs" instead of "preventing from noise as possibly occurring among the ribs"

m. On page 8, the first line of the second paragraph should be changed to "to close" instead of " when closing"

Appropriate correction is required.

2. Claims 1,2,4-6, and12 are objected to because of the following informalities:

n. In the first claim, right after the "improvement which comprises:" the second occurrence of "the said second stretcher rib" is redundant and is not needed.

o. Three lines into the improvement the spring device can only be secured to the stretcher rib or the runner it cannot be both.

p. In claims 2 and 6, the applicant should use one reference orientation throughout; inner and outer or upper and lower.

q. In claim 4, third line down, it should say "said stretcher rib "that is" pivotally connected".

r. In claim 12 the last 4 lines refer to the hook and are confusing and should be broken into multiple statements.

Appropriate correction is required.

Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. On page 4, 3rd line of 4th paragraph states that “the spring is secured to the stretcher rib or to the runner”, the applicant only described how to secure to the stretcher rib and should describe how to attach to the runner if the phrase is still be used in the claim.

4. The specification is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The specification contains subject matter which is not described in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is unclear in the second paragraph on page 8 as to how the ribs are “engaged” and what the “ball-and-socket” mechanism means.

On page 7, second paragraph, it is unclear how “gradually and quickly” can occur at the same time.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 7, and 12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 7, and 8 of U.S. Patent No. 6,736,151. Although the conflicting claims are not identical, they are not patentably distinct from each other because they disclose the same structure with a spring rib or resilient rib being used to transfer energy from a spring device or buffer device that is located in the stretcher rib out to a joint on the intermediate rib. Both disclose a slide member that has a hook that protrudes through a slot in the stretcher rib. Although not specified in the claims of patent 6,736,151 the joint would be the same and is implied by the drawings.

3. Claims 5 and 6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 7, and 8 of U.S. Patent No.

Art Unit: 3637

6,736,151 in view of U.S Patent 5,553,634 to Yang. Lin ('151) discloses every element as applied above. Lin ('151) does not disclose expressly the intermediate rib being formed of plastic, having two retainers, and having different sized grooves. Yang ('634) discloses an intermediate rib as integrally formed by plastic molding process (Col. 1, line 54-55). He discloses a top rib with an H shaped cross section. Lin ('151) and Yang ('634) are analogous art because they are both directed towards the rib structure of umbrellas. At the time of the invention it would have been obvious for a person of ordinary skill in the art to take the rib structure of Lin ('151) and make the intermediate rib of Yang out of plastic to allow different groove shapes and sizes such as the shape Yang uses on his top rib. In regards of the two retainer clips, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In regards to the shallow groove, it would have been an obvious matter of design choice to modify the sizes of the grooves of Yang's H cross section, since such a modification would have involved a mere change in the size of a component and the applicant has not disclosed that having a shallow groove solves any stated problem or is for any particular purpose. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237(CCPA 1955).

4. Claims 2-4 and 10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5,7, and 8 of U.S. Patent No. 6,736,151 in view of U.S Patent 5,553,634 to Yang. Lin ('151) discloses

Art Unit: 3637

every element as applied above. Lin ('151) does not disclose expressly the stretcher rib having narrow and wide grooves, the slide member being a rod, and having the spring attached adjacent to the runner. Yang ('634) discloses a top rib with an H shaped cross section. Lin ('151) and Yang ('634) are analogous art because they are both directed towards the rib structure of umbrellas. At the time of the invention it would have been obvious for a person of ordinary skill in the art to take the rib structure of Lin ('151) and make the stretcher rib have two grooves such as the shape Yang uses on his top rib to make the umbrella compress more. It would have been an obvious matter of design choice to modify the sizes of the grooves of Yang's H cross section, since such a modification would have involved a mere change in the size of a component and the applicant has not disclosed that having a shallow groove solves any stated problem or is for any particular purpose. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237(CCPA 1955). In regards to the rod as the slide member and the spring being attached adjacent to the runner, it would have been obvious matter of design choice to modify the slide member of Yang ('634) by having it made in the shape of a rod and to move the spring attachment location, since the applicant has not disclosed that having the slide member of rod shape or moving the spring end closer to the runner solves any stated problem or is for any particular purpose and it appears that the slide member and spring would perform equally well in shape and location disclosed by Yang.

1. Claims 8, 9 and 11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5,7, and 8 of U.S. Patent No. 6,736,151 in view of itself. Lin ('151) discloses every element as applied above. Lin ('151) does not disclose expressly that the joint be p shape, that the resilient connecting rib has two retainers, and the two axis of the joint are unaligned. Lin ('151) does disclose an integral joint on the intermediate rib (23) that is p-shaped (Fig. 2). At the time of the invention it would have been obvious for a person of ordinary skill in the art to take the joint on the rib (27) and use the shape of the joint that is used on the intermediate rib. In regards of the two retainer clips, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Although Lin does not disclose that the joints have axis unaligned it is well known that if four-arm linkages have their axis become aligned or become over aligned that the linkage will jam or stick. Accordingly, it would have been obvious for one of ordinary skill in the art to design the ribs with joints that won't align.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,048,550 to Su discloses a triple folding umbrella frame that uses a compression spring on the resilient connecting rib that helps to open the umbrella. U.S. Patent 6,470,899 to Johnson discloses a rib structure made of metal and says that it could be made out of lighter material such as fiberglass or plastic.

Art Unit: 3637

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Ayres whose telephone number is (571) 272-8299. The examiner can normally be reached on MON-FRI 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TMA

TMA 6/28/05

LANNA MAI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Lanna Mai